

## Abstract

The invention relates to an arrangement for a junction between a microstripline and a waveguide, comprising

- a microstripline (ML) which is fitted on the upper face of a dielectric substrate (S),
- a waveguide which is fitted on the upper face of the substrate (S) and has an opening (OB) on at least one end surface and has a structure (ST) which is in the form of a step or steps in the area of the opening (OB) on one side wall and is conductively connected in at least one part (ST1) to the microstripline (ML), and wherein one side wall of the waveguide is a metallized layer (LS) formed on the substrate (S),
- a cutout (A) which is formed in the metallized layer (LS) and into which the microstripline (ML) projects,
- rear-face metallization (RM) which is formed on the rear face of the substrate (S), and
- electrically conductive via holes (VH) between the metallized layer (LS) on the upper face of the substrate (S) and the rear-face metallization (RM), which surround the cutout (A).

(Figure 4)

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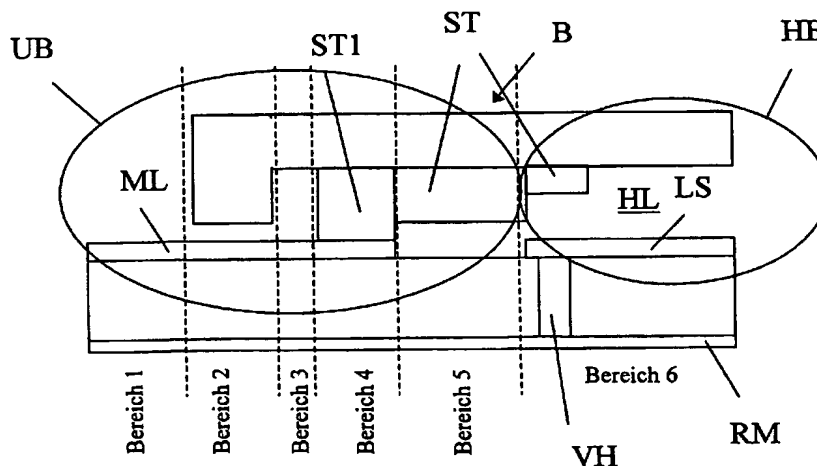
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(54) Bezeichnung: ÜBERGANG ZWISCHEN EINER MIKROSTREIFENLEITUNG UND EINEM HOHLLEITER



BEREICH = REGION

(57) Abstract: The invention relates to a configuration for a junction between a microstrip line and a waveguide, comprising: a microstrip line (ML), which is placed on the top side of a dielectric substrate (S); a waveguide, which is placed on the top side of the substrate (S) and which has an opening (OB) on at least one face and on a step-like structure (ST) provided on a lateral wall in the vicinity of the opening (OB) while, in at least one part (ST1), being conductively connected to the microstrip line (ML), whereby a lateral wall of the waveguide is a metallized layer (LS) provided on the substrate (S); a recess (A), which is made in the metallized layer (LS) and into which the microstrip line (ML) protrudes; a rear side metallization (RM) provided on the rear side of the substrate (S), and; electrically conductive through connections (VH) between the metallized layer (LS) on the top side of the substrate (S) and the rear side metallization (RM) that surround the recess (A).

[Fortsetzung auf der nächsten Seite]